



Office of Special Education  
Annual Report on First Steps Infants Identified through  
the Newborn Hearing Screening Program  
February 2017

## Purpose

Under the Newborn Hearing Screening law, RSMo 191.931, the Missouri Department of Elementary and Secondary Education shall “monitor the delivery of early intervention services to those infants identified by the newborn hearing screening program and report annually to the department of health and senior services.” Eligible infants are served by the Missouri First Steps Program under Part C of the Individuals with Disabilities Education Act (IDEA).

This report provides information related to the number of First Steps infants born in 2015 and identified with permanent hearing loss through the newborn hearing screening program.

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## Infants Enrolled in the First Steps Program

As of January 24, 2017, 121 infants born in 2015 were identified with hearing loss by the Department of Health and Senior Services (DHSS). It is important to note that the 121 infants included infants who received incomplete results or unknown types of loss based on what was reported to DHSS. Infants who were determined to be suffering from middle ear pathology (e.g., fluid in the middle ear from colds, ear infections) and who do not have a permanent hearing loss could be removed from the list at a later date based on updates received from audiologists.

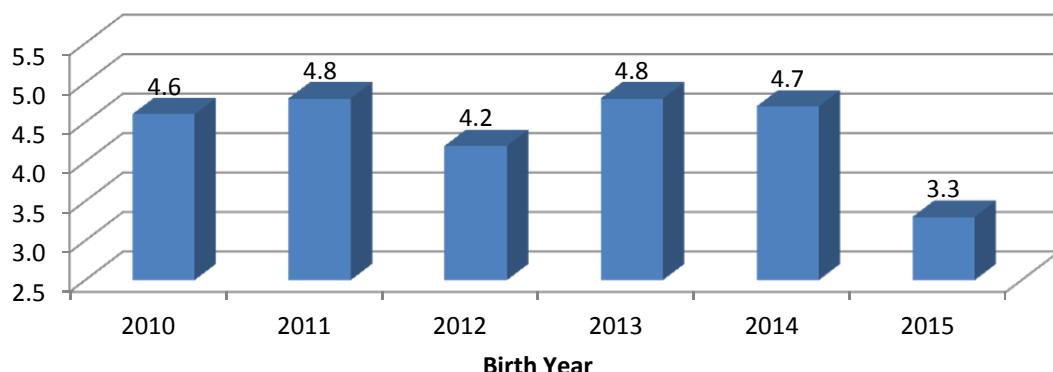
Of the 121 infants identified by DHSS, 105 (86.8%) had been referred to the First Steps program. Of the 105 infants referred to First Steps, 90 (85.7%) were found eligible and had an Individualized Family Service Plan (IFSP). The remaining 15 infants did not reach IFSP status due to the following reasons: six children were unable to be located, seven children were withdrawn by a parent or guardian, one child moved out of state, and one child was not eligible for the program.

Of the 90 infants who had an IFSP, 83 (92.2%) were in active status at the end of 2016, and seven had been inactivated as follows: five children moved out of state, one child was withdrawn by a parent or guardian, and one passed away.

## Average Age at Referral

Table 1 represents the average age in months of infants at the time of referral to First Steps for the 105 children referred to First Steps. The average age at referral for infants born in 2015 was 3.3 months. The average age at the time of initial IFSP for the 90 infants who reached IFSP was 4.9 months.

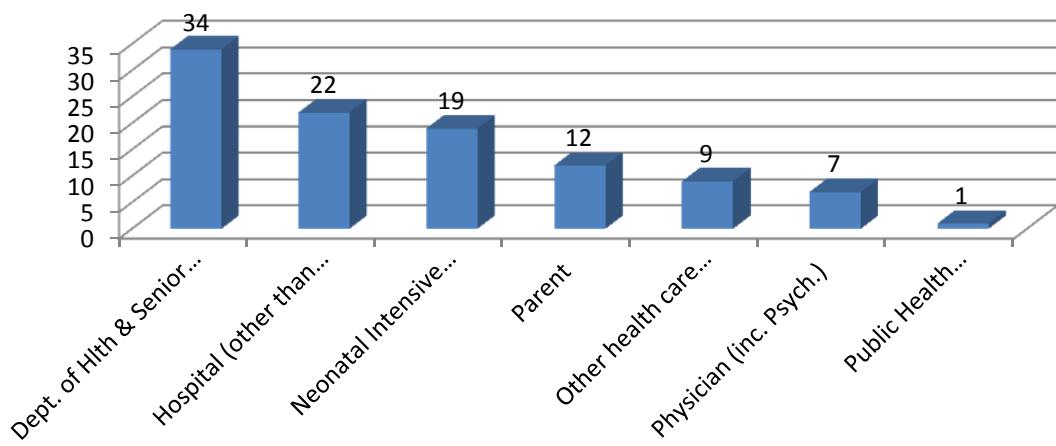
**Table 1: Average Age in Months at Referral**



## Referral Sources

Table 2 represents the sources of First Steps referrals for infants with hearing loss identified by DHSS. Of the 105 infants referred to First Steps, most referrals were made by Dept. of Health and Senior Services (DHSS) with 34 (32.7%), hospitals with 22 (21.2%), and Neonatal Intensive Care Unit (NICU) with 19 (18.3%).

**Table 2: First Steps Referral Sources**



## Eligibility Categories

Table 3 provides the primary First Steps eligibility category for the 90 infants determined eligible for services. There were 77 children (85.6%) found eligible due to a diagnosed condition.

**Table 3: Reasons for Eligibility**

Reason for Eligibility	Infants Eligible in 2015	% Eligible
Newborn Condition	8	8.9%
Diagnosed Condition	77	85.6%
Developmental Delay – Half age Delay	3	3.3%
Other Condition	2	2.2%
<b>Total</b>	<b>90</b>	<b>100.00%</b>

## Type of Hearing Loss

Table 4 represents the type of hearing loss and related First Steps referral and eligibility percentages for the 121 infants identified by DHSS. Of the 121 infants, 83 (68.6%) had a sensorineural hearing loss. Of the 83 infants with sensorineural hearing loss, 74 (89.2%) were referred to First Steps and, of those referred, 67 (90.5%) reached IFSP.

**Table 4: Type of Hearing Loss and First Steps Status**

Type of Loss	Infants Identified by NHS in 2014	Referred to First Steps	Reached IFSP	% Reached IFSP
Sensorineural	83	74	67	90.5%
Auditory Neuropathy	6	6	4	66.7%
Mixed	6	4	2	50.0%
Permanent Conductive	3	2	2	100.0%
Conductive	6	6	6	100.0%
Incomplete Testing and/or Unknown Type	17	13	9	69.2%
<b>Total</b>	<b>121</b>	<b>105</b>	<b>90</b>	<b>85.7%</b>

## Service Authorizations

Table 5 represents the First Steps service authorizations for the 83 infants identified by DHSS who were in active IFSP status at the end of 2016. At the end of calendar year 2016, there were 260 active authorizations for the 83 infants with hearing loss. The top three categories of First Steps service authorizations were:

- 1) 109 (41.9%) authorizations for Audiology;
- 2) 75 (28.8%) authorizations for Special Instruction; and
- 3) 29 (11.2%) authorizations for Physical Therapy.

**Table 5: First Steps Authorizations**

	ABR: Audiometry evoked potential	AT Service	Consultation/ Facilitation with Others	Direct Child Service	Evaluation/ Assessment	Family Education/ Training/Support	OAE limited or complete	Tympanometry (impedance testing	Visual Reinforcement Audiometer	Grand Total	Percentage
Audiology	13	13	4	28	2		23	13	13	109	41.9%
Occupational Therapy			5	14						19	7.3%
Physical Therapy			9	20						29	11.2%
Special Instruction			16	55	1	3				75	28.8%
Speech Language Pathology			3	25						28	10.8%
Grand Total	13	13	37	142	3	3	23	13	13	260	100.0%

Note: There were 46 authorizations for Assistive Technology devices.

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